

or is provided with, the approved results of a stability test of a sister vessel.

(d) The stability test of a vessel may be dispensed with if the Coast Guard determines that an accurate estimate of the vessel's lightweight characteristics can be made and that locating the precise position of the vessel's vertical center of gravity is not necessary to insure that the vessel has adequate stability in all probable loading conditions.

§ 170.180 Plans and information required at the stability test.

The owner of a vessel must provide the following Coast Guard approved plans and information to the authorized Coast Guard representative at the time of the stability test:

- (a) Lines.
- (b) Curves of form.
- (c) Capacity plans showing capacities and vertical and longitudinal centers of gravity of stowage spaces and tanks.
- (d) Tank sounding tables.
- (e) Draft mark locations.
- (f) General arrangement plan of decks, holds, and inner bottoms.
- (g) Inboard and outboard profiles.
- (h) The stability test procedure described in § 170.185(g).

§ 170.185 Stability test preparations.

The following preparations must be made before conducting a stability test:

- (a) The vessel must be as complete as practicable at the time of the test.
- (b) Each tank must be empty and dry, except that a tank may be partially filled or full if the Commanding Officer, Marine Safety Center determines that empty and dry tanks are impracticable and that the effect of filling or partial filling on the location of the center of gravity and on the displacement can be accurately determined.
- (c) All dunnage, tools, and other items extraneous to the vessel must be removed.
- (d) The water depth at the mooring site must provide ample clearance against grounding.
- (e) Each mooring line must be arranged so that it does not interfere

with the inclination of the unit during the test.

(f) The draft and axis of rotation selected for testing a mobile offshore drilling unit must be those that result in acceptable accuracy in calculating the center of gravity and displacement of the unit.

(g) The stability test procedure required by § 170.085 must include the following:

- (1) Identification of the vessel to be tested.
- (2) Date and location of the test.
- (3) Inclining weight data.
- (4) Pendulum locations and lengths.
- (5) Approximate draft and trim of the vessel.
- (6) Condition of each tank.
- (7) Estimated items to be installed, removed, or relocated after the test, including the weight and location of each item.
- (8) Schedule of events.
- (9) Person or persons responsible for conducting the test.

[CGD 79-023, 48 FR 51010, Nov. 4, 1983, as amended by CGD 88-070, 53 FR 34537, Sept. 7, 1988]

§ 170.190 Stability test procedure modifications.

The authorized Coast Guard representative present at a stability test may allow a deviation from the requirements of §§ 170.180 and 170.185 if the representative determines that the deviation would not decrease the accuracy of the test results.

§ 170.200 Estimated lightweight vertical center of gravity.

(a) Each tank vessel that does not carry a material listed in either Table 1 of part 153 or Table 4 of part 154 of this chapter may comply with this section in lieu of § 170.175 if it—

- (1) Is 150 gross tons or greater;
- (2) Is of ordinary proportions and form;
- (3) Has a flush weather deck, one or more longitudinal bulkheads, and no independent tanks; and
- (4) Is designed not to carry cargo above the freeboard deck.

(b) When doing the calculations required by §§ 170.170 and 172.065, the vertical center of gravity of a tank vessel in the lightweight condition must be

assumed to be equal to the following percentage of the molded depth of the vessel measured from the keel amidship:

(1) For a tank ship—70%.

(2) For a tank barge—60%.

(c) As used in this section, *molded depth* has the same meaning that is provided for the term in § 42.13–15(e) of this chapter.

[CGD 79–023, 48 FR 51010, Nov. 4, 1983, as amended by CGD 85–080, 61 FR 944, Jan. 10, 1996]

§ 170.210 Lightweight verification.

(a) Except as provided in paragraph (e) of this section, verification of a vessel's lightweight displacement and longitudinal center of gravity is required for all vessels, including vessels built prior to January 3, 1984, as follows:

(1) The owner must conduct a deadweight survey at intervals not exceeding 5 years to determine the lightweight displacement and longitudinal center of gravity, unless otherwise authorized by the Commandant.

(2) For each vessel, the date by which its initial periodic lightweight verification must be carried out will be determined by the OCMI by consideration of a number of factors. These factors include the history and condition of the vessel, the date of the vessel's last lightweight verification, the date of the vessel's next credit drydocking, and the expiration date of the vessel's Load Line Certificate.

(3) An authorized Coast Guard representative must be present at each deadweight survey conducted under this section.

(4) If the deviation from the lightweight displacement and longitudinal center of gravity does not exceed the values in paragraph (b) of this section, the owner must certify to the Commanding Officer, Marine Safety Center that the lightweight characteristics have not changed. The Commanding Officer, Marine Safety Center may accept the certification or require the owner to provide supporting calculations for review and approval.

(b) The owner must conduct a stability test in accordance with subpart F of this part, if—

(1) The deviation of the lightweight displacement calculated from the last

stability test exceeds 3 percent of the lightweight displacement;

(2) The deviation of the longitudinal center of gravity calculated from the last stability test exceeds 1 percent of LBP (length between perpendiculars);

(3) The deviation from the previously approved lightweight displacement, updated by documented alterations, exceeds 2 percent of the lightweight displacement; or

(4) The deviation from the previously approved longitudinal center of gravity, updated by documented alterations, exceeds 1 percent of LBP.

(c) If a stability test is required by paragraph (b) of this section, the stability booklet must be updated in accordance with § 170.110 to reflect the current stability condition of the vessel.

(d) The deadweight survey required in paragraph (a)(1) of this section must be repeated as part of the stability test required in paragraph (b) of this section, unless the entire stability test including the deadweight survey is completed at the same time.

(e) Periodic lightweight verification is not required for the following:

(1) Vessels to which the simplified stability test of § 171.030 of this chapter was applied;

(2) Vessels with an estimated lightweight center of gravity determined in accordance with § 170.200;

(3) Vessels to which § 170.175(d) applies;

(4) Self-elevating mobile offshore drilling units;

(5) Vessels regulated under subchapter D or subchapter I of this chapter whose lightweight displacement comprises less than 35 percent of their total fully loaded displacement; or

(6) Vessels exempted by the Commandant.

[CGD 89–037, 57 FR 41825, Sept. 11, 1992]

EFFECTIVE DATE NOTE: At 57 FR 41825, Sept. 11, 1992, § 170.210 was added, effective December 10, 1992. At 57 FR 58406, Dec. 10, 1992, the effective date was delayed indefinitely.

Subpart G—Special Installations

§ 170.235 Fixed ballast.

(a) Fixed ballast, if used, must be—